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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,152	09/05/2000	Markus Weisbeck	MO-5845/LEA3	6993

157 7590 10/02/2003

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EXAMINER

JOHNSON, EDWARD M

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 10/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/601,152

Applicant(s)

WEISBECK ET AL.

Examiner

Edward M. Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,8-11 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6,8-11 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. In view of Applicant's remarks, it is noted that the record has been amended by the Examiner to reflect that previously renumbered claim 14 has been renumbered again as claim 13.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 6-7 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller et al. WO 9602323A1 (translated in US Pat. No. 5,859,265).

Regarding claim 6, Muller '265 discloses a method for regeneration of a catalyst based on titanium silicalite (see abstract) with a gold modifier (see column 4, lines 33-36 and claim 3) comprising contacting the catalyst with a solution of hydrogen peroxide in mineral acid (see column 5, lines 16-18), wherein the catalyst is used in various oxidation processes (see column 1, lines 10-11).

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Regarding claim 9, the claimed range of hydrogen peroxide includes zero and Muller '265 discloses catalyst in contact with 0.196% hydrogen peroxide (see Example 3).

Regarding claim 10, Muller '265 discloses a method for regeneration of a catalyst based on titanium silicalite (see abstract) with a gold modifier (see column 4, lines 33-36 and claim 3).

Regarding claim 11, Muller '265 discloses gas phase olefin epoxidation in the presence of hydrogen (see column 4, lines 6-61).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller '265 as applied to claim 6 above, and further in view of Bowman et al. 6,031,116.

Muller fails to disclose contacting the catalyst being regenerated with steam under pressure.

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Bowman '116 discloses adding water into the gas (see column 12, lines 50-67 and column 13, lines 1-6).

It is considered that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the water of Bowman with the oxidation catalyst regeneration of Muller because Bowman discloses his water to be beneficially added to the regeneration gas stream, for oxidation catalyst regeneration (title and abstract) and Muller discloses high temperature regeneration in inert gas or solution (see column 5, lines 9-18).

Regarding claim 13, Muller '265 discloses acidic pH (see column 5, lines 15-16) and Bowman '116 discloses washing with water at a pH of 5-11 (see column 9, lines 40-42).

Response to Arguments

6. Applicant's arguments filed 5/23/03 have been fully considered but they are not persuasive.

The rejections under 35 USC 112(2) have been withdrawn in view of Applicant's amendment.

It is argued that Applicants note that the Examiner continues to fail to cite a reference... silicon dioxide. This is not persuasive because titanium silicalite does in fact contain both titanium dioxide and silicon dioxide. For Applicant's benefit, references have been attached to this Office Action

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explaining this fact. Taramasso et al. US 4,410,501 discloses titanium silicalite defined as containing both titanium dioxide and silicon dioxide (see abstract). Neri et al. US 4,609,765 discloses titanium silicalite defined as containing both titanium dioxide and silicon dioxide (see abstract). Arca et al. US 6,103,915 discloses titanium silicalite defined as containing both titanium dioxide and silicon dioxide (see column 4, lines 22-28).

It is argued that in his response to applicants arguments... the word "comprising". This is not persuasive because both "wherein" and "comprising" are considered recitations of open language, either or both of which would not exclude the inclusion of silicon dioxide in the claimed material to be regenerated.

It is argued that Applicants respectfully contend... instant Office Action. This is not persuasive because Muller does not fail to disclose the limitation in question, since a compound containing both titanium dioxide and silicon dioxide is disclosed (see above). Further, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made,

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and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). And, in any case, Bowman is not relied upon for a disclosure of Applicant's alleged deficiency, but rather for a disclosure of adding water into the gas. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 703-305-0216. The examiner can normally be reached on M-F 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

EMJ
September 29, 2003


STANLEY S. SILVERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700